

### **REMARKS**

Claims 1-6 are pending in this application. Claims 1 and 3 are independent claims.  
Reconsideration in view of the following remarks is respectfully solicited.

#### **Allowable Subject Matter**

Applicants gratefully acknowledge the Examiner's indication of allowable subject matter in claims 3 and 4 over the art of record. However, Applicants respectfully submit that all of claims 1-6 are allowable, for at least the reasons set forth below.

#### **The Claims Define Patentable Subject Matter**

The final Office Action makes the following rejections:

(1) claims 1, 2 and 5 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,879,859 to Boveja (hereafter Boveja);

(2) claim 6 is rejected under 35 U.S.C. §103(a) as being unpatentable over Boveja in view of U.S. Patent No. 7,010,351 to Firlik et al. (hereafter Firlik);

(3) claims 1, 2 and 5 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Application Publication No. 2002/0123774 to Loeb et al. (hereafter Loeb) in view of Boveja; and

(4) claim 6 is rejected under 35 U.S.C. §103(a) as being unpatentable over Loeb in view of Boveja and further in view of Firlik.

These rejections are respectfully traversed.

Applicants respectfully submit that Boveja, either alone or in combination with Loeb and/or Firlik, fails to teach or suggest each and every feature as set forth in the claimed invention.

**Rejection under 102(e)**

Regarding the rejection under Boveja, the Examiner alleges that the “wherein” clause in claim 1, added by the previous amendment, only inferentially sets forth the ability to produce the pulse of 300ms or more, therefore such an ability is not positively claimed. (see final Office Action, page 2). Applicants respectfully disagree with this allegation.

For example, Applicants respectfully submit that the Examiner is improperly ignoring a claim limitation that does indeed carry patentable weight. In U.S. patent law, the determination of whether the “wherein” clause is a limitation in a claim depends on the specific facts of the case. Furthermore, in *Hoffer v Microsoft Corp*, 405 F.3d 1326, 1329, 74 USPQ2d 1481, 1483 (Fed. Cir. 2005), the court held that when a “whereby” clause states a condition that is material to patentability, it cannot be ignored in order to change the substance of the invention ” *Id.*

Applicants submit that the Examiner is trying to change the substance of the invention by improperly ignoring the “wherein” clause in claim 1, because such a feature fails to be disclosed in Boveja.

Specifically, Applicants respectfully submit that the present case is distinguishable from Boveja at least because Boveja merely discloses a system that includes parameters that fall outside of the required parameters for a “long pulse stimulation”. For example, in Boveja the parameters for the “pulse width” only fall within the range of 0.05 ms to 4.0 ms. (see Boveja, col. 15, lines 13-62). As such, Boveja’s system cannot possibly provide a “long pulse stimulation” to a patient because it clearly fails to include a required pulse width of 300ms or more.

At least for the reason noted above, Applicants respectfully submit that the Examiner is improperly ignoring a claim limitation that clearly states a condition that is material to patentability.

Furthermore, contrary to the Examiner’s belief, the “wherein” clause in claim 1 fails to only inferentially set forth the ability of the pulse generator. Instead, the claim language specifically sets forth what the pulse generator does... “a sine wave current is feed from the pulse generator when the external coil is positioned at an external site in proximity to where the internal coil is implanted so

that a long pulse stimulation (LPS) with a pulse width of 300ms or more is effective on the stomach.” (emphasis added). As such, contrary to the Examiner’s beliefs, no inferential statement is present in the above noted “wherein” clause.

Furthermore, Applicants respectfully point out that the term “long pulse stimulation” is understood in the art to designate a stimulation with a frequency close to the intrinsic gastric slow wave frequency (IGF) and with a pulse width of 300ms or more. (see Applicants’ specification, pages 1-2).

As such, it goes to follow that the present invention is aimed at providing a gastric electrical stomach stimulation apparatus that uses a pulse generator and an external coil connected thereto to send electricity to an internal coil, which is implantable in a patient. In the present invention, the internal coil is connected to a waveform rectifier circuit, which is connected to electrodes, which are designed to be positioned in contact with a gastric wall. A sine wave current is fed from the pulse generator when the external coil is positioned at an external site in proximity to where the internal coil is implanted so that a long pulse stimulation with a pulse width of 300ms or more is effective on the stomach.

In contrast with the present invention, Boveja merely discloses a system that includes parameters that fall outside of the required parameters for a “long pulse stimulation”. For example, in Boveja the parameters for the “pulse width” only fall within the range of 0.05 ms to 4.0 ms. (see Boveja, col. 15, lines 13-62). As such, Boveja’s system cannot possibly provide a “long pulse stimulation” to a patient because it fails to include a pulse width of 300ms or more.

For at least the reasons noted above, Applicants respectfully submit that Boveja fails to teach or suggest each and every feature as set forth in the claimed invention.

According to MPEP §2131, “a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. Of California*, 814 F.2d 628, 631, 2 USPQ2d 1051 (Fed. Cir. 1987). “The identical invention must be shown in as complete detail as is contained in the

...claims.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913 (Fed. Cir. 1989). The elements must be arranged as required by the claims, but this is not an *ipsissimis verbis* test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

Applicants respectfully submit that the Office Action has failed to establish the required *prima facie* case of anticipation because the cited reference, Boveja, fails to teach or suggest each and every feature as set forth in the claimed invention.

Applicants respectfully submit that independent claim 1 is allowable over Boveja for at least the reasons noted above.

As for dependent claims 2 and 5, this claim is also allowable for at least the reasons set forth above regarding its corresponding independent claim, and/or for the further features claimed therein.

Accordingly, withdrawal of the rejection of claims 1, 2 and 5 under 35 U.S.C. §102(e) is respectfully solicited.

### **Rejections under §103**

Applicants also respectfully submit that both Loeb and Firlik fail to make up for the above-noted deficiencies found in Boveja.

Applicants respectfully submit that neither Loeb, Firlik, nor Boveja, taken singularly or in combination, (assuming these teachings may be combined, which Applicants do not admit) teach or suggest a long pulse stimulation with a pulse width of 300ms or more and a system being adaptable for a patient whose vagus nerve has been cut. Loeb and Firlik offer no specific parameters at all for its system and Boveja’s parameters are nowhere near the required pulse width of 300ms or more.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or

suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on Applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP 706.02(j).

Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness at least in part because the Examiner has failed to show how each and every feature is taught by the cited art.

Applicants respectfully submit that the combination of cited art fail to teach or suggest each and every feature as set forth in the claimed invention.

Applicants respectfully submit that independent claim 1 is allowable over the combination of Loeb and Boveja for at least the reasons noted above.

As for each of the dependent claims not particularly discussed above, these claims are also allowable for at least the reasons set forth above regarding their corresponding independent claims, and/or for the further features claimed therein.

Accordingly, withdrawal of the rejection of claims 1, 2, 5 and 6 under 35 U.S.C. §103(a) is respectfully requested.

### **Conclusion**

In view of the foregoing, Applicants respectfully submit that the application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact Carolyn T. Baumgardner (Reg. No. 41,345) at (703) 205-8000 **to schedule a Personal Interview.**

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If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment from or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §1.16 or under 37 C.F.R. §1.17; particularly, the extension of time fees.

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